

Technical Stakeholder Working Group Meeting Summary – Fall 2021

General permit overview

The Division of Water Resources has been directed by the North Carolina General Assembly to develop general permits by July 1, 2022, for existing Animal Feeding Operations (AFO) that intend to build and operate a digester system. [Senate Bill 605](#), known as the 2021 Farm Act, describes the general permit requirements. Currently, digester systems are processed as modifications to a facility's existing permit.

The new general permits will apply to currently permitted facilities seeking to add digester systems. The Department, under the 2021 NC Farm Act, maintains the authority to require an individual permit for a facility adding a digester when necessary.

Input process

Event	Type of Feedback	Timeframe
Stakeholder Process	Technical Workgroup Sessions	Fall 2021
Stakeholder Process	Public Meeting/Forum - oral, written and electronic comments accepted	Fall/Winter 2021
Public Comment Period	Public Meetings - oral, written and electronic comments accepted	Winter 2021/Spring 2022

Existing permits

As of Sept. 27, 2021, out of 2,083 total permitted swine facilities in North Carolina, there are 15 facilities which have one or more animal waste digester systems.

[List of Permits](#)

Stakeholder process

DWR invited a group of approximately 60 stakeholders to gather input on the general permits content over two meetings in November-December 2021. The stakeholders represented community groups and environmental non-governmental organizations, state agencies and universities, and permittee and industry representatives.

Meeting #1: November 19, 2021

28 attendees met via Zoom to learn about the parameters of the general permits and then participated in breakout sessions discussing these sections of the existing general permit:

- Performance Standards
- Operations and Maintenance
- Monitoring and Reporting

- Other Conditions, including Inspections and Entry, General Conditions, Penalties and Definitions

Staff gathered policy and technical questions from attendees to answer in the second session.

Key themes

Participants raised the following issues:

- Monitoring for methane, nitrous oxide and ammonia from constructed biogas operations.
- The potential economic opportunity of the digester systems that could also remove potential pollutants from farm properties.
- More frequent monitoring of groundwater nearby digester operations
- Having the new general permits carry over the same monitoring conditions as the existing general permits.
- Potential expanded alert system for breaches.
- Better explanations of technical components of the general permits and digester systems for the communities near digester facilities.
- Avoiding overly regulating operations that are already regulated under existing permits.
- Further study of cumulative impacts on properties near farming operations.
- Addressing cattle and poultry operations as unique from swine operations.

Meeting #2: December 7, 2021

39 attendees rejoined on Zoom for the second work group session. They heard responses to some questions raised to staff from the first session, and then added feedback on discussion prompts from DWR staff on these items needing further input:

- Notification requirements on construction, completion and startup operations
- Operational parameters
- Priorities for recordkeeping requirements of operations and maintenance
- Parameters, analytical components, frequency and duration of influent and effluent monitoring
- Monitoring and reporting of failures, bypasses and other operational disruptions
- Safety precautions during severe weather or other emergency events
- Requirements for design and equipment in the digester system
- Requirements for infrastructure associated with the transport of biogas
- Conditions for use or re-introduction of tail gas in digester operations
- Requirements for inspection conditions and frequency specific to digester systems

Key themes

Participants raised the following issues:

- Ensuring pipelines carrying gas from digesters are properly sealed and monitored
- General permits capturing the wide range of digester system types that could be used.
- Improving understanding of the reporting process and where public records can be found.
- Potential for expanded notification of neighbors of construction of a digester system.

- Providing more details on responsibility for addressing gas transportation issues beyond the farm property.
- More frequent monitoring of effluent from facilities.
- Not adding additional requirements from existing general permits to new digester system operations.
- Potential need for an expanded emergency alert system for potential spills or leaks.
- Fully defining what elements of the digester and transportation system are covered under the general permits and regulated by DWR.
- Making sure other area of DEQ (particularly the Division of Air Quality) are involved in the general permit development.

Next steps

After draft permits are produced by DWR staff, the Department will hold three public hearings in the spring of 2022. Information on meeting locations and comment procedures for these hearings will be released early next year.